

# Registration Is Open!

May 14-16, 2018

Angeles National Forest Training Center, Arcadia CA

**3<sup>rd</sup> Southern California Chaparral Symposium:**

## **GLOBAL CHANGE AND THE VULNERABILITY OF CHAPARRAL ECOSYSTEMS**



***Sponsored by the US Forest Service Pacific Southwest Region, the California Fire Science Consortium and the Santa Monica Mountains Fund***

Chaparral vegetation dominates much of California, and there is growing appreciation of its ecological importance and its role in providing vital ecosystem services. At the same time, chaparral landscapes in California are increasingly under threat from regional and global pressures including rising human populations and expanding cityscapes, warming temperatures and multiyear droughts, air pollution, and progressively more frequent fire. We build on the topics of the first symposium (*Chaparral Restoration*, 2013) and the second symposium (*Ecological Value of Chaparral*, 2015), and this year focus on the ecological vulnerability of chaparral landscapes, and what managers might do to promote chaparral persistence and resilience in the face of environmental change.

The first 1.5 days of the symposium (May 14 afternoon and May 15) will be dedicated to a set of engaging presentations by regional and national experts on chaparral vulnerability in the context of regional and global environmental threats and related management and scientific topics. The morning of May 16 (Wednesday), will include a presentation on a new ecosystem service assessment tool being developed by a joint USFS-UC-USGS-Michigan State team. The tool will allow spatial estimates of carbon, surface water runoff and groundwater recharge, sediment retention, recreation, and other services on the landscape, and will ultimately include the ability to assess the effects of wildfires and management options. The symposium will conclude (May 16 afternoon) with a field trip to a chaparral site on the Angeles National Forest. ***Attendance is free. Field trip space is limited.***

***For registration, visit:*** <https://www.eventbrite.com/e/the-3rd-california-chaparral-symposium-global-change-and-the-vulnerability-of-chaparral-ecosystems-registration-43458375170>

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# AGENDA

Monday, May 14, 2018

1:00 pm to 1:25 pm	Welcome, introductions, and agenda	Hugh Safford (US Forest Service)
1:25 pm to 1:50 pm	Detecting drought refugia in the chaparral: a case-study from the CA Channel Islands	Aaron Ramirez (Reed College)
1:50 pm to 2:15 pm	Global change and the vulnerability of chaparral shrubs to acute drought versus chronic drought	Stephen Davis (Pepperdine Univ.)
2:15 pm to 2:40 pm	Chaparral response to heat waves: Extreme heat reduces the carbon gain of chaparral shrubs	Alex Pivovarovoff (UCLA)
2:40 pm to 3:10 pm	Questions and Discussion	
3:10 pm to 3:20 pm	Break	
3:20 pm to 3:45 pm	Vulnerability of chaparral plant functional types to multiple stressors: climate, fire and land use	Janet Franklin (UC Riverside)
3:45 pm to 4:10 pm	Effects of climate variability, stand age and global change on carbon sequestration and productivity in the chaparral of SoCal	Walt Oechel (San Diego State Univ.)
4:10 pm to 4:35 pm	Does chaparral stand age influence the magnitude of post-fire debris flow? Initial insights from the Thomas Fire and the recent Montecito debris flow	Jason Kean (USGS)
4:35 pm to 5:00 pm	Questions and Discussion	

Tuesday, May 15, 2018

8:15 am to 8:30 am	Introduction to Day	Hugh Safford (US Forest Service)
8:30 am to 8:50 am	The ever changing role of climate and weather in chaparral fire regimes	Jon Keeley (USGS) & Alexandra Syphard (Conservation Biology Institute)
8:50 am to 9:10 am	Effects of future climate on fire regimes	Max Moritz (UC ANR & UCSB)
9:10 am to 9:40 am	Questions & Discussion	
9:40 am to 10:00 am	The Santa Monica Mountains Wildland Fire Resilient Landscape Cooperative: Integrating conservation and wildfire risk reduction	Marti Witter (NPS) & Jay Lopez (LA County Fire)
10:00 am to 10:20 am	Environmental correlates with type conversion and what the future holds	Alex Syphard (CBI) Tess Brennan (USGS) & Jon Keeley (USGS)
10:20 am to 10:50 am	Questions and Discussion	
10:50 am to 11:00 am	Break	

11:00 am to 11:20 am	Tools for seed sourcing in a changing world	Arlee Montalvo (Riverside-Corona Resource Conservation District)
11:20 am to 11:40 pm	Implications for chaparral restoration from exotic root-rotting <i>Phytophthora</i>	Katie VinZant (USFS) & Susan Frankel (USFS PSW)
11:40 pm to 12:10 pm	Questions and Discussion	
12:10 pm to 1:30 pm	LUNCH- <i>on your own</i>	
1:30 pm to 1:50 pm	Challenges of chaparral restoration- can a trait-based approach help?	Carla D'Antonio (UC Santa Barbara)
1:50 pm to 2:10 pm	Trait based approaches to understanding and maximizing ecosystem resilience	Marko Spasojevic (UC Riverside)
2:10 pm to 2:40 pm	Questions and Discussion	
2:40 pm to 3:00 pm	Estimating recreational use values of shrublands on public lands	Frank Lupi (Michigan State University)
3:00 pm to 3:20 pm	Connecting Californians to the chaparral	Richard Halsey (CA Chaparral Institute)
3:20 pm to 3:50 pm	Questions and Discussion	
4:00 pm to 4:30 pm	Panel Discussion from Valuing Chaparral Ecosystem Book	
<b>4:30 pm to 5:30 pm</b>	<b>POSTER SESSION</b>	

**Wednesday, May 16, 2018**

**CHAPARRAL ECOSYSTEM SERVICES (ES) PROJECT**

8:00 am to 8:15 am	Project Overview	Hugh Safford (US Forest Service)
8:15 am to 8:45 am	Mapping of ecosystem services	Emma Underwood (UC Davis)
8:45 am to 9:15 am	Economic valuation of services	Lorie Srivastava (UC Davis) & Frank Lupi (Michigan State Univ)
9:15 am to 10:45 am	Introduction to ecosystem services tool and viewing of outreach video on valuing ES in chaparral	Emma Underwood (UC Davis)
10:45 am to 5:30 am	<b>FIELD TRIP- <i>bring lunch with you</i></b>	